

## Attachment D

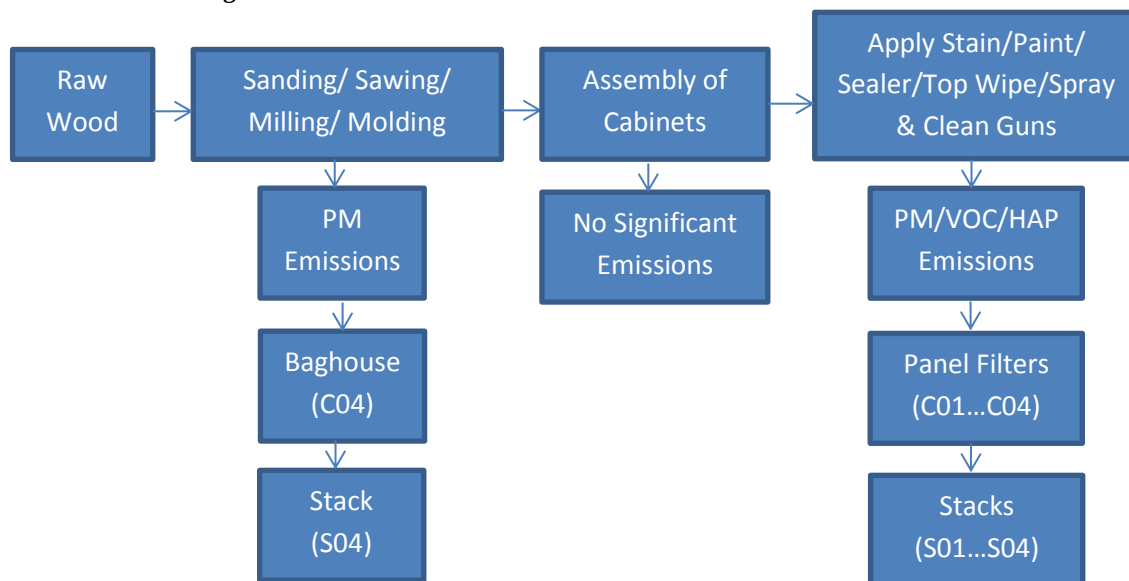
### 1. Form SYNMIN

This Form was submitted with the original application dated February 26, 2013

### 2. Description of Operations:

Prestige Custom Cabinetry, Inc., manufactures custom wooden cabinetry. The process includes cutting, sanding, routing various hard and soft woods for construction of cabinetry (P04). All particulate matter generated from the process is controlled by a baghouse (C04) and then vents to the atmosphere through a stack (S04). Cabinet components are assembled using mechanical and no VOC containing adhesives. There are three spray booths (P01..P03) where solvent and water based stains, paints, topcoats, and sealers are applied to wood cabinets. The stains are generally applied by hand using rags. All other coatings are applied using HVLP spray gun. The particulate matter from overspray is controlled with wall filters (C01..C03) and then vented to three stacks (S01...S03), one for each spray booth.

#### Process Flow Diagram



### 3. Identification of Emission Units, Control Equipment & Air Pollution Generating Activities

Stack No.	Stack Height & Diameter (ft)	ACFM	Process No.	Control Device No.	Description
S01	25.98/2.82	12,000	P01	C01	Spray Booth
S02	25.98/2.82	12,000	P02	C02	Spray Booth
S03	25.98/2.82	12,000	P03	C03	Spray Booth
S04	30/2.67x2.67	25,000	P04	C04	Woodworking

## S01/P01/C01 - Spray Booth - Existing

Spray booth: Apply stains, sealers, paints, topcoats limited customized color matching.

Applications method: One HVLP gun, pot and cup reservoirs, stains are generally hand wiped.

Air Pollutant Control Method: Panel air filters for particulate emissions 98 percent efficient

Gun Cleaning: Spray guns are cleaned by hand using lacquer thinner. Spent cleaning solvent is disposed of as hazardous waste.

## S02/P02/C02 - Spray Booth - Existing

Spray booth: Apply stains, sealers, paints, topcoats limited customized color matching.

Applications method: One HVLP gun, pot and cup reservoirs, stains are generally hand wiped.

Air Pollutant Control Method: Panel air filters for particulate emissions 98 percent efficient.

Gun Cleaning: Spray guns are cleaned by hand using lacquer thinner. Spent cleaning solvent is disposed of as hazardous waste.

## S03/P03/C03 - Spray Booth - Existing

Spray booth: Apply stains, sealers, paints, topcoats limited customized color matching.

Applications method: One HVLP gun, pot and cup reservoirs, stains are generally hand wiped.

Air Pollutant Control: Panel air filters for particulate emissions 98 percent efficient.

Gun Cleaning: Spray guns are cleaned by hand using lacquer thinner. Spent cleaning solvent is disposed of as hazardous waste.

## S04/P04/CO4 - Woodworking Operations – Existing

Process: Kiln-dried wood, mainly maple, oak, veneered and non-veneered plywood/mdf, chip board is planned, molded, sanded, and ripped to product specification.

Air Pollution Control Equipment: DISA, NFG 5HJ-1BL Baghouse, 99% control efficiency.

#### 4. Types & Amount of Fuel Used

The facility only burns natural gas which is used for convenience heating of the offices and manufacturing areas. There is no process related heating.

### 5. Type of Raw Material Used & Production Rates

Process	Material	Normal Usage	Maximum Usage
Spray Booths (P01..P03)	Stain	1.29 gal/hr	10.5 gal/hr
	Sealer	12.9 gal/day	
	Topcoat	3000 gal/yr	
	Paint		
Woodworking Operation	Wood Waste	177 lbs/hr 1770 lbs/day 40 tons/year	215 lbs/hr

### 6. Operating Schedule

Normal operating schedule is 10 hours per day, 4.5 days per week, 52 weeks per year.

### 7. Existing Limitations

The facility was issued a Synthetic Minor, Non-Part 70 State of Wisconsin Air Construction & Operation Permit on April 18, 2007. The facility was limited to the following:

- VOCs - 45 tons facility wide, 3.71 tons/monthly average – Track product usage calculate emissions monthly, use only HVLP guns.
- Any single Federal HAP – 9.996 tons/yr, 1666 lbs/monthly average – Track product usage calculate emissions monthly, use only HVLP guns.
- Combined Federal HAPS – 24.996 tons/yr, 4166 lbs/monthly average – Track product usage calculate emissions monthly, use only HVLP guns.
- P04/C04/S04 – 0.90 lbs/hour PM – Performed stack testing (provide with previous submittal), record magnehelic gauge readings once per 8 hours of operation.
- P01/C01/S01 – 0.25 lbs/hour PM – Inspect filters daily for proper fit, placement and condition; use panel filters rated at a minimum control efficiency of 98%.
- P02/C02/S02 – 0.25 lbs/hour PM – Inspect filters daily for proper fit, placement and condition; use panel filters rated at a minimum control efficiency of 98%.
- P03/C03/S03 – 0.25 lbs/hour PM – Inspect filters daily for proper fit, placement and condition; use panel filters rated at a minimum control efficiency of 98%.

## Attachment E Table of Estimated Emissions

### E(i) Existing Sources

The following are contaminants of concern related to the facility operations. Insignificant sources not included (calculations enclosed).

Pollutant	PTE (tpy)	Proposed Allowable (tpy)
PM	4.65	10
PM10	2.89	10
PM2.5	0.52	10
SOx	Insignificant	Insignificant
NOx	Insignificant	Insignificant
CO	Insignificant	Insignificant
VOCs	370	99
Pb	Insignificant	Insignificant
All Federal HAPs	<25	24.99
Individual Federal HAPs	<10	9.99
Fluorides	Insignificant	Insignificant
H2SO4	Insignificant	Insignificant
H2S	Insignificant	Insignificant
TRS	Insignificant	Insignificant
RSC	Insignificant	Insignificant

### E(ii) Existing Sources

The following are contaminants of concern related to the facility operations. Insignificant sources not included (calculations enclosed).

Pollutant	Current Actual (tpy)	Current Allowable (tpy)**	Post-Change Potential Emissions (tpy)	Post-Change Allowable Emissions (tpy)
PM	0.473	7.227	4.65	10
PM10	0.139	7.227	2.89	10
PM2.5	0.040	7.227	0.52	10
SOx	Insignificant	Insignificant	Insignificant	Insignificant
NOx	Insignificant	Insignificant	Insignificant	Insignificant
CO	Insignificant	Insignificant	Insignificant	Insignificant
VOCs	6.26*	45	370	99
Pb	Insignificant	Insignificant	Insignificant	Insignificant
All Federal HAPs	2	24.99	<25	24.99
Individual Federal HAPs	1	9.99	<10	9.99
NH3	Insignificant	Insignificant	Insignificant	Insignificant
Fluorides	Insignificant	Insignificant	Insignificant	Insignificant
H2SO4	Insignificant	Insignificant	Insignificant	Insignificant
H2S	Insignificant	Insignificant	Insignificant	Insignificant
TRS	Insignificant	Insignificant	Insignificant	Insignificant
RSC	Insignificant	Insignificant	Insignificant	Insignificant

\*Based on deducting solvent waste taken off site for hazardous waste disposal

\*\* Based on WDNR air permit 305000410-F02